Appendix to Amendment B
With Replacement Paragraphs Marked-Up to Indicate Changes

Box Non-Fee Amendments

Commissioner for Patents

Washington, District of Columbia 20231

Sir:

Pursuant to Rule 121, the following is a copy of all of the paragraphs amended by the attached Amendment A, with all changes indicated by bracketing deletions and underlining additions:

Page 1, first paragraph. Replace with the following new paragraph:

--The invention relates to branching in personal computer entertainment, computer-based learning, interactive media, electric amusement devices, improvisational theater, computer generation of animated cartoons, and video games. It provides a method and apparatus for interactively invoking a sequence of events which form a narrative. [It enables the player to create different paths in the narrative by invoking different sequences of events.] Players simply introduce nouns into narrative settings. These nouns advance the plot by responding to the environment, or by other elements within the setting responding to it.

Page 1, last paragraph (extends to page 2). Replace with the following new paragraph:

--Computer adventure games, one prior art, are typically operated by instructing an avatar in the game to perform a specific task. These instructions were either literal or contextual. A literal instruction is given by entering sentences into a

computer. For example, the player might type "kiss the dragon". The game avatar then performed the task. However, several difficulties arise from a literal interface mechanism. To date, computers are incapable of understanding the full range of human expression available within a typed command. Therefore acceptable commands were commonly restricted to an extremely limited subset of language. Players were often confused by what words were acceptable and what were not. [Computer adventure games, one prior art, are typically operated by instructing a character in the game to perform a specific task. These instructions were either literal or contextual. A literal instruction is given by entering sentences into a computer. For example, the player might type "kiss the dragon". The game character then performed the task. However, several difficulties arise from a literal interface mechanism. To date, computers are incapable of understanding the full range of human expression available within a typed command. Therefore acceptable commands were commonly restricted to an extremely limited subset of language. Players were often confused by what words were acceptable and what were not.]

Page 2, second paragraph (first full paragraph). Replace with the following new paragraph:

--A contextual command exists within a computer adventure game's environment. The player selects an object in the environment and the game avatar then performs an action specific to that object. An example is, the player selects a dragon in the scene, and because the avatar has no sword, the avatar kisses the dragon. Contextual interfaces simplify computer adventure games by restricting input to objects available within the environment. However, objects in the environment can mislead the player about their purpose. One object might be used for different purposes in different contexts. Also, objects adorning the

environment for aesthetic purposes might not be commands. A player who tries to use adornments as commands becomes frustrated when they do nothing. Objects that behave differently in different contexts also frustrate the player, by taking away their sense of being in control. To avoid these hassles, players often resort to the dull strategy of clicking on everything. The potential for a player controlling the story is then wasted. Other problems exist. In spacious 3D environments, a constrained view often complicates a player's task to find command objects. The view isn't necessarily pointing in a direction that contains a command object. [A contextual command exists within a computer adventure game's environment. The player selects an object in the environment and the game character then performs an action specific to that object. An example is, the player selects a dragon in the scene, and because the character has no sword, the character kisses the dragon. Contextual interfaces simplify computer adventure games by restricting input to objects available within the environment. However, objects in the environment can mislead the player about their purpose. One object might be used for different purposes in different contexts. Also, objects adorning the environment for aesthetic purposes might not be commands. A player who tries to use adornments as commands becomes frustrated when they do nothing. Objects that behave differently in different contexts also frustrate the player, by taking away their sense of being in control. To avoid these hassles, players often resort to the dull strategy of clicking on everything. The potential for a player controlling the story is then wasted. Other problems exist. In spacious 3D environments, a constrained view often complicates a player's task to find command objects. The view isn't necessarily pointing in a direction that contains a command object.]

Page 2, third paragraph (second full paragraph). Replace with the following new paragraph:

--The methods and apparatuses of prior art computer adventure games, can be described as verb oriented. Commands given to a character in the story force an action that the character must perform. This is easy to see in text adventure games with examples like: TRAVEL north, PICK up ax, TALK to dragon. In visual, contextual interfaces, the objects selected are nouns, but the object's command always makes the main character perform an action. Consider these examples: click on door -> OPEN door; click on ax -> PICK up ax; click on dragon -> either TALK or KILL, depending upon if the avatar has a sword in their hand. Prior art adventure game mechanisms directly manipulate a story avatar. Therefore, their mechanisms are based on verbs. [The methods and apparatuses of prior art computer adventure games, can be described as verb oriented. Commands given to a character in the story force an action that the character must perform. This is easy to see in text adventure games with examples like: TRAVEL north, PICK up ax, TALK to dragon. In visual, contextual interfaces, the objects selected are nouns, but the object's command always makes the main character perform an action. Consider these examples: click on door -> OPEN door; click on ax -> PICK up ax; click on dragon -> either TALK or KILL, depending upon if the main character has a sword in their hand. Prior art adventure game mechanisms focus on directly manipulating the character. Therefore, their mechanisms are based on verbs.]

Page 2, fourth paragraph. Replace with the following new paragraph:

--Another common problem with prior art adventure games occurs as players guide their avatar through the story. [Another common problem with prior art adventure games occurs as players guide their character through the world.] The

players get lost in the world. They lose track of where they came from and how to get to where they are going. Although traversing a maze can be a form of entertainment, not every adventure game should be a maze. With this invention, the player is never lost. Discovering new areas of the world never has the downside of causing the player to worry about navigation. In this invention if players make a mistake, they can simple rewind the narrative.

Page 3, fifth paragraph. Replace with the following new paragraph:

-- Unlike adventure games, controlling a sim game is not exclusively verb oriented. Sims have no central or main personality like an adventure game's avatar. [Sims have no central or main personality.] Typical sim games are controlled with both verb and noun oriented commands. Verb commands entities specified along with the command, such as: SEND child to school bus, or order an ant to PRODUCE its gathering scent. Sim games also use noun oriented commands to affect an environment like: add a TELEVISION to a household, summon MONSTER to the city. The difference between verb and noun oriented commands can be determined by what they affect. Verb commands typically affect an entity. Noun commands typically affect an environment.

Page 4, second paragraph. Replace with the following new paragraph:

--The invention's operation is completely noun driven. It does not use an avatar. Simply put, a player introduces nouns into a story and discovers the result of their introduction. As the player learns how elements interact within situations, trial and error gives way to deliberation and anticipation. The process of discovering each element's usefulness can be a lot of fun. A wealth of richness and depth is achieved in the telling of these stories because the same object might be put to different uses. [The invention's operation is highly noun oriented.

Simply put, a player introduces elements (nouns) into a story and discovers the result of their introduction. As the player learns how elements interact with situations, trial and error gives way to deliberation and anticipation. The process of discovering each element's usefulness can be a lot of fun. A wealth of richness and depth is achieved in the telling of these stories because the same object might be put to different uses due to situation and personality variables.]

Page 4, fourth paragraph. Replace with the following new paragraph:

--This invention does not utilize U.S. Pat. No. 5,676,551, which derives a branching narrative by explicitly controlling an avatar's emotions. According to that patent, the player dictates an emotion and the avatar acts accordingly to it and the current situation. This invention foregoes direct manipulation of an avatar. Instead all characters in the setting may react to a noun introduced. This invention focuses on advancing a story by letting users determine the sequence of events in a narrative. Character emotions may change only as a side effect in this invention. However, those changes may be reflected in the character's actions during subsequent events and/or expressed as direct feedback. [This invention does not utilize U.S. Pat. No. 5,676,551, which derives a branching narrative by explicitly controlling the main character's emotions. According to that patent, the player dictates an emotion and the main character acts accordingly to it and the current situation. This invention foregoes direct manipulation of the main character. Instead the main character reacts only to the events which arise out of introducing story elements. This invention focuses on advancing a story by letting users determine the sequence of events in a narrative. Changes to the character's emotions are a side effect in this invention. However, those changes may be reflected in the character's actions during subsequent events and/or expressed as direct feedback.]

Page 4, last paragraph. Replace with the following new paragraph:

--The player is benefited by being able to choose the order of nouns introduced and even rewind the sequence of their introduction, thereby allowing the exploration of different sequences of introductions. The player is never lost nor stuck. The mechanism for controlling the sequence is as simple as a context sensitive list of available elements and a rewind command. [The player is benefited by being able to choose the order of events and even rewind the current sequence, thereby allowing the exploration of different sequences of events. The player is never lost nor stuck. The mechanism for controlling the sequence is as simple as a context sensitive list of available elements and a rewind command.]

Page 5, second paragraph. Replace with the following new paragraph:

--Between events, simulated characters continue to act for narrative continuity. They should always exhibit behaviors appropriate to their individual characters. Perhaps one character's goal is to find the Emerald City, such as Dorothy in `The Wizard of Oz`. Therefore, between the invocation of events, Dorothy's simulated character should be following a yellow brick road. Character simulation is important. Simulated characters can provide a strong sense of reality to character's lives. Dorothy's simulation should even eat and sleep occasionally. [Between events, the simulated character or characters continue to act for narrative continuity. They should always exhibit behaviors appropriate to their character. Perhaps a main character's goal is to find the Emerald City, such as Dorothy in 'The Wizard of Oz'. Therefore, between the invocation of events, Dorothy's simulated character should be following a yellow brick road. Character simulation is important. Simulated characters can provide a strong sense of reality to character's lives. Dorothy's simulation should even eat and sleep occasionally.]

Page 5, third paragraph. Remove this paragraph.

--[Products based on this invention should present special feedback about the character's state of mind that is relevant to the narrative. This kind of feedback should be selected to inspire players as to their choices of events. Suppose a character in a fantasy story is shown to be tired and wounded, the player would then prefer to choose a 'Room at the Inn' element instead of a 'Pack of Wolves' element.]

Page 5, fourth paragraph. Replace with the following new paragraph:

--This invention does not exclude avatar based interactive control. It simply does not require it. Actions occurring during the enactment of a noun introduction event may be interactive. Players could be allowed to participate. Consider the example; a fight breaks out while an event unfolds. The player could be allowed to control the physical actions of one character for the duration of the fight. Here is where a game designer or storyteller might reintroduce verb oriented control of a temporary avatar. [Additionally, actions occurring during the enactment of an event can be interactive. Players could be allowed to participate. Consider the example; a fight breaks out while an event unfolds. The player could be allowed to control the physical actions of the character for the duration of the fight. This sort of interaction differs from invoking events. Here is where a game designer or storyteller might reintroduce verb oriented control of the main character.]

Page 5, fifth paragraph. Replace with the following new paragraph:

--Finally, the invention is certainly unique to the field of interactive entertainment. To date, there exists no interactive narrative that branches upon the introduction of nouns. They nearly all branch on direct commands (verbs), picking conversation topics, or navigating locations. Even employing an avatar's

inventory items during a game is a command based on the verbs: USE or GIVE. [Finally, the invention is certainly unique to the field of interactive entertainment. To date, there exists no interactive narrative that branches upon the introduction of story elements. They nearly all branch on direct commands (verbs), picking conversation topics, the application of inventory items, or navigating locations.]

Page 6, first paragraph. Replace with the following new paragraph:

--This invention enables playful control over the order of events which comprise a narrative. It does this by allowing the player to introduce objects or ideas (nouns) into the narrative. The noun's introduction triggers events which progress the narrative in a meaningful way. Players not only choose which nouns to introduce, but they may rewind the narrative if the resulting events do not appeal to them. [This invention enables playful control over the order of events which comprise a narrative. It does this by allowing the player to introduce story elements into the narrative. An element's introduction triggers events which progress the narrative in a meaningful way. Players not only choose which elements to introduce, but they may rewind the narrative if the result doesn't appeal to them.]

Page 6, second paragraph. Replace with the following new paragraph:

--This invention defines an event as: what happens when a noun is introduced into a story. These events produce actions or expressions which change the story's situation. For example, the arrival of a character triggers dialogue or other actions. The discovery of an item or information can change a situation. The attainment of a goal often leads to the promotion of new goals or a conclusion. The enactment of an event might be as long as a battle or as short as a wink. [This invention defines an event as: what happens when an element is introduced into

a story. These events produce actions or expressions which change the story's situation. Examples are: the arrival of a character triggers dialogue or other actions. The discovery of an item or information can change a situation. The attainment of a goal often leads to the promotion of new goals or a conclusion. The enactment of an event might be as long as a battle or as short as the transmission of an item.]